

Taxonomic Review of the Subtribe *Astenina* (Coleoptera, Staphylinidae) from Korea

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Abstract - A taxonomic review of the subtribe *Astenina* in Korea is presented. Five species and two genera are recognized, four species of which are recorded for the first time in Korea [*Nazeris opatatus* (Sharp), *Astenus brevipes* (Sharp), *A. porosus* (Sharp), and *A. suffusus* (Sharp)]. The genus *Nazeris* Fauvel is new to Korea. The key and diagnosis of each species are presented. [Taxonomy, Insecta, Coleoptera, Staphylinidae, Paederinae, *Astenina*, Korea].

INTRODUCTION

The species of subtribe *Astenina* Hatch are recognizable by combination of: apical maxillary palpomere minute, ventrally lobed fourth tarsomere and bidentate labrum (Newton, 1990). Most species are found in leaf litter with humid condition.

This subtribe consists 15 species of two genera in Northeast Asia (Shibata 1977; Yuh *et al.* 1985; Li 1992). Only one species, *Astenus bicolon* (Sharp) has been recorded so far in Korea (Yuh *et al.* 1985). In this study, five species of Korean subtribe *Astenina* are recognized. Four species among them are recorded for the first time in Korea. I made the diagnosis of species and the illustrations of their male genitalia herein.

RESULTS

Key to the Korean genera and species of subtribe *Astenina*

1. Labrum emarginated, each side with one small teeth (genus *Astenus*) 2
- Labrum emarginated, each side with two teeth *Nazeris opatatus*
2. Body black *Astenus porosus*
- Body not black but yellowish or reddish brown 3
3. Abdomen VI-VII with the erected long hairs

- 4
- Abdomen VI-VII without the erected long hairs *Astenus brevipes*
4. Body length small (4.0~4.5 mm); body yellowish brown *Astenus bicolon*
- Body larger (5.5~6.0 mm); body reddish brown *Astenus suffusus*

Subtribe *Astenina* Hatch, 1957

 곰보개미반날개아족 (신칭)

Genus *Nazeris* Fauvel, 1873

 좁막지곰보개미반날개속 (신칭)

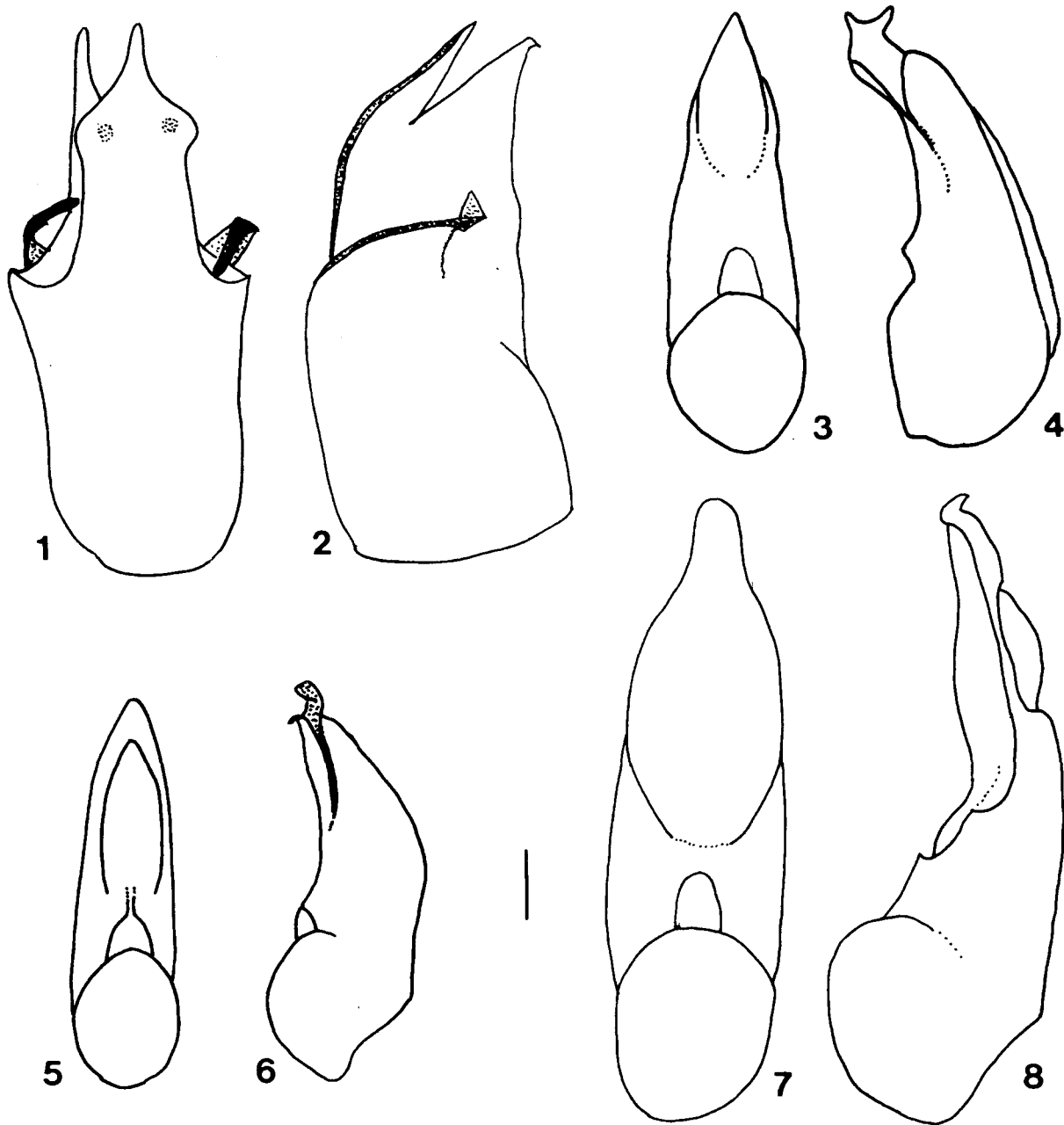
1. *Nazeris opatatus* (Sharp, 1889)

 좁막지곰보개미반날개 (신칭)

Mesunius optatus Sharp, 1889: 322.

Nazeris optatus: Bernhauer et Schubert, 1912: 212; Adachi, 1955: 17; Adachi, 1957: 12; Nakane, 1963: 87; Shibata, 1977: 31.

Diagnosis. Body 4.8~5.2 mm; body reddish brown, a little shiny. Head much larger than elytra, coarsely and closely punctate; antennae with the first antennomere darker, and longer and stouter than the others. Pronotum distinctly longer than broad, much rounded in front, and a little narrowed behind, very coarsely punctate, somewhat shining, with a slight impression on either side of the middle at the base. Elytra small, narrow, especially at the shoulders, and densely, coarsely, and deeply punctured. Abdomen with fine punctures, male penultimate sternite



Figs. 1-8. *Nazeris opatatus* (Sharp): 1, aedeagus (ventral view); 2, aedeagus (lateral view). *Astenus bicolor* (Sharp): 3, aedeagus (ventral view); 4, aedeagus (lateral view). *Astenus brevipes* (Sharp): 5, aedeagus (ventral view); 6, aedeagus (lateral view). *Astenus porosus* (Sharp): 7, aedeagus (ventral view); 8, aedeagus (lateral view). Sclae = 0.08 mm.

deeply emarginated.

Male genitalia (Figs. 1, 2): median lobe pen point-shaped in apical area (ventral view), dorsal part well sclerotized partially and longitudinally (lateral view). Paramere slender and the apical area bent to ventro-inside (ventral view).

Specimens examined. 1 ♂, Kangwon-do, Taebaek-shi, Mt. Taebaeksan, 31 Jul. 1986, Y. B. Cho; 1 ♂, Chungchongbuk-do, Yongdong-gun, Mt. Minjujisan, 2 Sep. 1988, Y.B. Cho; 1 ♂, Ulsan, Sangbuk-myun, Mt. Kajisan, 22 May 1999, Y.B. Cho.

Distribution. Korea, Japan.

Genus *Astenus* Dejean, 1833

곰보개미반날개속(개칭)

2. *Astenus bicolon* (Sharp, 1874)

쌍점곰보개미반날개(개칭)

Sunius bicolon Sharp, 1874: 72.

Astenus bicolon: Bernhauer et Schubert, 1912: 214; Adachi, 1955: 18~19; Adachi, 1957: 12; Nakane, 1963: 88; Shibata, 1977: 33; Yuh et al. 1985: 237.

Diagnosis. Body length 4.0~4.5 mm; body yellowish-brown, narrow and elongate, elytron with one black spot (some specimens with unclear spot or without it), 6th and 7th segments of abdomen black. Head rather broader than pronotum, densely punctured; eye large and prominent, antennae pale yellow, long and slender, 3rd antenomere much longer than 2nd, 10th antenomere scarcely visibly stouter than the 9th, quite twice as long as broad; 11th joint slender and elongate. Pronotum much narrower than elytra, much longer than broad, much narrowed behind. Elytra long and distinctly narrowing to posterior, roughly and moderately closely punctured, a little shining. Abdomen very elongate and narrow, distinctly broadening to posterior, rather closely and distinctly punctured. Legs pale yellow.

Male genitalia (Figs. 3, 4): median lobe narrowing towards apex and the tip pointed (ventral view). The apical area with two projected parts (lateral view).

Specimens examined: 2♂ 1♀, Chungchongbuk-do, Poun-gun, Janggye-ri, 3 Oct. 1995, Y. B. Cho; Cheju-do: 1♂, Sogwipo-shi, Donnaeko, 2 Feb. 1985, K.S. Lee; 1♀, Kashiri, 16 May 1985, K.S. Lee; 1♀, Kashiri, 10 Aug. 1985, K.S. Lee.

Distribution. Korea, Japan, China, Taiwan.

3. *Astenus brevipes* (Sharp, 1874)

곰보개미반날개(신칭)

Sunius brevipes Sharp, 1874: 71.

Astenus brevipes: Bernhauer et Schubert, 1912: 214; Adachi, 1955: 19; Adachi, 1957: 12; Nakane, 1963: 88; Shibata, 1977: 33~34.

Diagnosis. Body length 3.0~3.4 mm; body light yellowish-brown, dull shinny. Head rather broader than the pronotum, densely punctured and not shining; eyes moderately prominent, antennae yellow, 3rd antenomere longer than 2nd, about equal to the 4th, 10th a little stouter than 9th, only a little longer than broad, 11th distinctly broader than 10th and bead-like. Pronotum rather narrower than the elytra, shorter

than the head, color similar to it, considerably narrowed behind, densely punctured. Elytra distinctly longer than the pronotum, slightly paler in color, densely and rugosely punctured, just a little less dull than head and thorax. Abdomen densely punctured, the 6th segment black, and 7th also infusate, male 7th sternite furnished on the under side with narrow but deep triangular notch. Legs yellow.

Male genitalia (Figs. 5, 6): median lobe narrowing towards apex and the tip blunt (ventral view). The tip area with two projected parts, bented ventrally (lateral view).

Specimens examined. Chungchongbuk-do: 2♂, Poun-gun, Janggye-ri, 3 Oct. 1995, Y.B. Cho; 1♀, Yongdong-gun, Mt. Minjujisan, 2-3 Sep. 1988, Y.B. Cho; 3♀, Chongwon-gun, Ochang-myun, 18 May 1997, Y.B. Cho; 1♂, YonPung-myun, Suok-ri, 30 May 1996, Y.B. Cho; 1♂, Kyungsanagbuk-do, Kyungsan-shi, Bumaegi reservoir, 25 Jul. 1986, Y.B. Cho; Cheju-do: 1♂, Sogwipo-shi, 27 Jul. 1984, K.S. Lee; 2♀, Pyosun-myun, 10 Mar. 1985, K.S. Lee.

Distribution. Korea, Japan, Taiwan.

4. *Astenus porosus* (Sharp, 1889)

검은곰보개미반날개(신칭)

Sunius porosus Sharp, 1889: 322.

Astenus porosus: Bernhauer et Schubert, 1912: 218; Adachi, 1955: 19; Adachi, 1957: 12; Shibata, 1977: 36.

Diagnosis. Body length 5.0~5.5 mm; body black; strong punctures, no shinny. Head broad, slightly broader than the elytra, coarsely reticulate, antennae moderately long, penultimate joint nearly twice as long as broad. Pronotum a little narrower than the elytra, much narrowed behind, slightly longer than broad, coarsely reticulate. Elytra only about as long as the pronotum, very coarsely, deeply, and densely punctate. Abdomen not very elongate, coarsely punctured, the two apical segments much more sparingly punctured and a little shining.

Male genitalia (Figs. 7, 8): median lobe narrowing towards apex and lateral sides of subapical area slightly emarginated (ventral view). The tip bented dorsally (lateral view).

Specimens examined. 1♂, Kyonggi-do, Pochon-gun, Kwangrung-sumokwon, 18 Oct. 1995, Y.B. Cho; Kangwon-do, Kosung-gun, 15 Nov. 1996, T.S. Kwon; 1♂ 1♀, Chungchongbuk-do, Yongdong-gun, Mt. Minjujisan, 7 Sep. 1997, Y.B. Cho; 1♂, Kyongsangbuk-do, An-

dong-shi, Yean-myun, 15 Jul. 1987, Y.B. Cho; 1 ♂ 5 ♀, Kyoungsnagnam-do, Hapchon-gun, Hakum-ri, Mt. Whangmae-san, 29 Jun. 1998, Y.B. Cho; Chejudo, Sogwipo-shi: 3 ♂, 10 Apr. 1986, K.S. Lee; 1 ♀, 12 Dec. 1984, K.S. Lee; 1 ♀, 1 Jan. 1985, K.S. Lee; 1 ♀, 17 Jan. 1985, K.S. Lee; 1 ♂, 3 Feb. 1985, K.S. Lee; 1 ♀, 20 Sep. 1985, K.S. Lee.

Distribution. Korea, Japan.

5. *Astenus suffusus* (Sharp, 1874)

끝검은곰보개미반날개 (신칭)

Sunius suffusus Sharp, 1874: 73.

Astenus suffusus: Sharp, 1889: 322; Bernhauer et Schubert, 1912: 219; Adachi, 1955: 19; Adachi, 1957: 13; Nakane, 1963: 88; Shibata, 1977: 36; Li, 1992: 52.

Diagnosis. Body length 5.5~6.0 mm; body dark reddish brown, no shinny. Head broader than the pronotum, densely punctured and dull; eyes large and prominent, remote from the hinder angles, antennae very long and slender, 3rd antennomere much longer than 2nd, 4~10th each one considerably thicker at the extremity than at the base. Pronotum longer than broad, greatly narrowed behind, its width in front about equal to that of the elytra, marked at the sides with black, coarsely punctured and not shining. Elytra coarsely punctured, but little longer than the pronotum. Abdomen elongate and narrow, coarsely and closely punctured, the two apical segments black. Legs yellow.

Specimens examined: 1 ♀, Cheju-do, Songpanak, 13 Jun. 1985, K.S. Lee.

Distribution. Korea, Japan, China.

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한국산 곰보개미반날개 아족(딱정벌레목, 반날개과)의 분류학적 검토

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적요 - 한국산 곰보개미반날개 아족의 분류학적 검토를 수행하였다. 2속 5종이 동정되었고 이들 중, 4종 [*Nazeris opatatus* (Sharp), *Astenus brevipes* (Sharp), *A. porosus* (Sharp), and *A. suffusus* (Sharp)]이 미기록종으로 밝혀졌다.